

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-2. (canceled)

3. (currently amended) Heat exchanger according to claim ~~[[2]]~~ 16, wherein the sealing means (8) comprise a spacing bush (14), which is arranged around the tube (4) and interposed between the sealing means (13a, 13b).

4. (currently amended) Heat exchanger according to claim ~~[[2]]~~ 16, wherein the sealing means (8) comprise a bush pressing element (15) arranged around the tube (4) and acting on the second sealing means (13b).

5. (original) Heat exchanger according to claim 4, wherein the bush pressing element (15) shows a face (16) facing to and abutting on the clamping plate (11), wherein said face shows a predetermined number of sealing riflings (17).

6. (currently amended) Heat exchanger according to claim ~~[[1]]~~ 17, wherein each holding seat (10) is delimited in radial direction by the containing plate (9), externally, and by the surface of the tube (4), internally, and it is axially delimited, on the one side, by the tube plate (6) and, on the other side, by the clamping plate (11).

7. (currently amended) Heat exchanger according to claim ~~[[1]]~~ 16, wherein the clamping plate (11) abuts on the containing plate (9).

8. (currently amended) Heat exchanger according to claim ~~[[1]]~~ 16, wherein containing plate (9) abuts on the tube plate (6).

9. (currently amended) Heat exchanger according to claim ~~[[1]]~~ 16, further comprising a sealing gasket (18), which is interposed between the containing plate (9) and the tube plate (6).

10. (currently amended) Heat exchanger according to claim ~~[[1]]~~ 16, further comprising a sealing gasket (19), which is interposed between the clamping plate (11) and the containing plate (9).

11. (currently amended) Heat exchanger according to claim ~~[[1]]~~ 16, wherein said clamping plate (11), in correspondence to an outer surface thereof, shows a seat ~~(20)~~ (30) which is fit for housing an adequate gasket.

12-13. (canceled)

14. (currently amended) Heat exchanger according to claim ~~[[2]]~~ 16, wherein a ~~the~~ clamping packing of tube plate (6), containing plate (9) and clamping plate (11) implies deformation of at least the said sealing elements (13a, 13b), due to compression.

15. (canceled)

16. (new) Heat exchanger comprising:

- a bearing structure (2), which defines at least a main chamber (3);
- a predetermined number of tubes (4), which cross said main chamber (3);
- at least a secondary chamber (5), which is in fluid connection with said tubes (4) and fluid proof with respect to the main chamber (3);
- at least a tube plate (6), which shows the adequate seats (7) for housing said tubes (4), wherein said tube plate (6) is interposed between the main chamber (3) and the secondary chamber (5);

- sealing means (8) interposed at least between the main chamber (3) and the secondary chamber (5) to avoid fluid flow-by, wherein it further comprises:
 - a containing plate (9), which shows a respective holding seat (10) for each tube (4), wherein said holding seat (10) is crossed by a tube (4) and houses the sealing means (8); and
 - each holding seat (10) being delimited in radial direction by the containing plate (9), externally, and by the surface of the tube (4), internally, and the holding seat (10) being also axially delimited, on the one side, by the tube plate (6) and, on the other side, by the clamping plate (11).

The sealing means (8) comprising at least a first and a second sealing element (13a, 13b) for each tube (4), wherein said sealing elements (13a, 13b) surround the tube (4) and are housed in the holding seat (10) defined by the containing plate (9).

17. (new) Heat exchanger comprising:

- a bearing structure (2), which defines at least a main chamber (3);
- a predetermined number of tubes (4), which cross said main chamber (3);
- at least a secondary chamber (5), which is in fluid connection with said tubes (4) and fluid proof with respect to the main chamber (3);
- at least a tube plate (6), which shows the adequate seats (7) for housing said tubes (4), wherein said tube plate (6) is interposed between the main chamber (3) and the secondary chamber (5);
- sealing means (8) interposed at least between the main chamber (3) and the secondary chamber (5) to avoid fluid flow-by, wherein it further comprises:
 - a containing plate (9), which shows a respective holding seat (10) for each tube (4), wherein said holding seat (10) is crossed by a tube (4) and houses the sealing means (8), the sealing means (8) comprising at least a first and a second sealing element (13a, 13b) for each tube (4), wherein said sealing

means (13a, 13b) surround the tube (4) and are housed in the holding seat (10) defined by the containing plate, the sealing means (8) further comprising a spacing bush (14), which is arranged around the tube (4) and interposed between the sealing means (13a, 13b); and

- a clamping plate (11), which equally shows respective through seats (12), in order to put the secondary chamber (5) in fluid connection with the tubes (4), wherein said containing plate (9) is interposed between the tube plate (6) and the clamping plate (11).

18. (new) Heat exchanger comprising:

- a bearing structure (2), which defines at least a main chamber (3);
- a predetermined number of tubes (4), which cross said main chamber (3);
- at least a secondary chamber (5), which is in fluid connection with said tubes (4) and fluid proof with respect to the main chamber (3);
- at least a tube plate (6), which shows the adequate seats (7) for housing said tubes (4), wherein said tube plate (6) is interposed between the main chamber (3) and the secondary chamber (5);
- sealing means (8) interposed at least between the main chamber (3) and the secondary chamber (5) to avoid fluid flow-by, wherein it further comprises:
 - a containing plate (9), which shows a respective holding seat (10) for each tube (4), wherein said holding seat (10) is crossed by a tube (4) and houses the sealing means (8), the sealing means (8) comprising at least a first and a second sealing element (13a, 13b) for each tube (4), wherein the said sealing elements (13a, 13b) surround the tube (4) and are housed in the holding seat (10) defined by the containing plate (9); and
 - a clamping plate (11) which equally shows respective through seats (12) in order to put the secondary chamber (5) in fluid connection with the tubes (4), wherein said containing plate (9) is interposed between the tube plate (6) and

the clamping plate (11), said clamping plate (11), in correspondence to an outer surface thereof, has a seat (30) which is fit for housing an adequate gasket, a clamping packing of tube plate (6), containing plate (9) and clamping plate (11) implies deformation of at least the said sealing elements (13a, 13b), due to compression.